

Company Banks Oil Company Lease & Well No. Harrington "A" #1  
 Elevation 2147 Kelly Bushing Mississippi Effective Pay - Ft. Ticket No. 12945  
 Date 8/17/81 1 31S 18W Comanche Kansas  
 Sec. Twp. Range County State  
 Test Approved by Scott Banks Western Representative Karl L. West, Jr.

Formation Test No. 1 Interval Tested from 4963 ft. to 5030 ft. Total Depth 5030 ft.  
 Packer Depth 4958 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Packer Depth 4963 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -  
 Top Recorder Depth (Inside) 4968 ft. Recorder Number 13267 Cap. 4050  
 Bottom Recorder Depth (Outside) 5027 ft. Recorder Number 1051 Cap. 4250  
 Below Straddle Recorder Depth -- ft. Recorder Number - Cap. -

Drilling Contractor D. R. Lauck Drlg. Rig #1 Drill Collar Length 394 I. D. 2.26 in.  
 Mud Type salt-gel Viscosity 48 Weight Pipe Length - I. D. - in.  
 Weight 9.5 Water Loss 12.0 cc. Drill Pipe Length 4637 I. D. 3.8 in.  
 Chlorides 19,000 P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 in.  
 Jars: Make WIC Serial Number 410 Anchor Length 67 ft. Size 5 1/2 in.  
 Did Well Flow? Yes Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.  
 Main Hole Size 7 7/8 in. Tool Joint Size - in.

Initial flow period very weak to strong in eight minutes. Gas to surface in thirteen minutes. See attached sheet for gas measurements.

Blow: 214 ft. of mud  
 Recovered 214 ft. of mud  
 Recovered - ft. of -  
 Recovered - ft. of -  
 Recovered - ft. of -  
 Recovered - ft. of -

Remarks: Tight spot 1300' below surface.

Time Set Packer(s) 6:00 ~~AM~~ P.M. Time Started Off Bottom 10:15 ~~AM~~ P.M. Maximum Temperature 120°  
 Initial Hydrostatic Pressure (A) 2540 P.S.I.  
 Initial Flow Period (B) 25 Minutes (C) 93 P.S.I. to (D) 93 P.S.I.  
 Initial Closed In Period (E) 45 Minutes (F) 1065 P.S.I.  
 Final Flow Period (G) 90 Minutes (H) 85 P.S.I. to (I) 89 P.S.I.  
 Final Closed In Period (J) 93 Minutes (K) 1065 P.S.I.  
 Final Hydrostatic Pressure (L) 2472 P.S.I.

## GAS FLOW REPORT

Date 8/17/81 Ticket 12945 Company Banks Oil Company  
 Well Name and No. Harrington #1 Dst No. 1 Interval Tested 4963'-5030'  
 County Comanche State Kansas Sec. 1 Twp. 31S Rg. 18W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
<b>PRE FLOW</b>						
		Gas to surface in thirteen minutes.				
	15 min.	9.0 PSIG	1/2" orifice			108,000 CFPD
	20 min.	8.5 PSIG	1/2" orifice			105,000 CFPD
	25 min.	9.0 PSIG	1/2" orifice			108,000 CFPD
	30 min.	9.0 PSIG	1/2" orifice			108,000 CFPD

<b>SECOND FLOW</b>						
	10 min.	13.0 PSIG	1/2" orifice			134,000 CFPD
	20 min.	11.0 PSIG	1/2" orifice			121,000 CFPD
	30 min.	11.0 PSIG	1/2" orifice			121,000 CFPD
	40 min.	11.0 PSIG	1/2" orifice			121,000 CFPD
	50 min.	11.0 PSIG	1/2" orifice			121,000 CFPD
	60 min.	11.0 PSIG	1/2" orifice			121,000 CFPD
	70 min.	12.0 PSIG	1/2" orifice			129,000 CFPD
	80 min.	11.0 PSIG	1/2" orifice			121,000 CFPD
	90 min.	11.0 PSIG	1/2" orifice			121,000 CFPD

### GAS BOTTLE

Serial No. -- Date Bottle Filled ----- Date to be Invoiced 8/17/81

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1 1/2% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Banks Oil Company  
 Authorized by Scott Banks

**WESTERN TESTING CO., INC.**  
**Pressure Data**

Date 8/17/81 Test Ticket No. 12945  
 Recorder No. 13267 Capacity 4050 Location 4968 Ft.  
 Clock No. - Elevation 2147 Kelly Bushing Well Temperature 120 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2540</u>	P.S.I.	<u>6:00P</u>	<u>M</u>
B First Initial Flow Pressure	<u>93</u>	P.S.I.	<u>30</u>	<u>25</u> Mins.
C First Final Flow Pressure	<u>93</u>	P.S.I.	<u>45</u>	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>1065</u>	P.S.I.	<u>90</u>	<u>90</u> Mins.
E Second Initial Flow Pressure	<u>85</u>	P.S.I.	<u>90</u>	<u>93</u> Mins.
F Second Final Flow Pressure	<u>89</u>	P.S.I.		
G Final Closed-in Pressure	<u>1065</u>	P.S.I.		
H Final Hydrostatic Mud	<u>2472</u>	P.S.I.		

**PRESSURE BREAKDOWN**

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>5</u> Inc.		Breakdown: <u>15</u> Inc.		Breakdown: <u>18</u> Inc.		Breakdown: <u>31</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>0</u>	<u>0</u>	<u>93</u>	<u>0</u>	<u>85</u>	<u>0</u>	<u>89</u>
P 2	<u>5</u>	<u>3</u>	<u>285</u>	<u>5</u>	<u>85</u>	<u>3</u>	<u>255</u>
P 3	<u>10</u>	<u>6</u>	<u>683</u>	<u>10</u>	<u>85</u>	<u>6</u>	<u>664</u>
P 4	<u>15</u>	<u>9</u>	<u>884</u>	<u>15</u>	<u>85</u>	<u>9</u>	<u>856</u>
P 5	<u>10</u>	<u>12</u>	<u>965</u>	<u>20</u>	<u>85</u>	<u>12</u>	<u>941</u>
P 6	<u>25</u>	<u>15</u>	<u>1003</u>	<u>25</u>	<u>85</u>	<u>15</u>	<u>977</u>
P 7		<u>18</u>	<u>1022</u>	<u>30</u>	<u>85</u>	<u>18</u>	<u>1002</u>
P 8		<u>21</u>	<u>1034</u>	<u>35</u>	<u>85</u>	<u>21</u>	<u>1018</u>
P 9		<u>24</u>	<u>1045</u>	<u>40</u>	<u>85</u>	<u>24</u>	<u>1028</u>
P10		<u>27</u>	<u>1049</u>	<u>45</u>	<u>85</u>	<u>27</u>	<u>1036</u>
P11		<u>30</u>	<u>1053</u>	<u>50</u>	<u>85</u>	<u>30</u>	<u>1040</u>
P12		<u>33</u>	<u>1056</u>	<u>55</u>	<u>86</u>	<u>33</u>	<u>1043</u>
P13		<u>36</u>	<u>1058</u>	<u>60</u>	<u>87</u>	<u>36</u>	<u>1046</u>
P14		<u>39</u>	<u>1060</u>	<u>65</u>	<u>88</u>	<u>39</u>	<u>1049</u>
P15		<u>42</u>	<u>1062</u>	<u>70</u>	<u>89</u>	<u>42</u>	<u>1052</u>
P16		<u>45</u>	<u>1064</u>	<u>75</u>	<u>89</u>	<u>45</u>	<u>1056</u>
P17				<u>80</u>	<u>89</u>	<u>48</u>	<u>1057</u>
P18				<u>85</u>	<u>89</u>	<u>51</u>	<u>1058</u>
P19				<u>90</u>	<u>89</u>	<u>54</u>	<u>1059</u>
P20						<u>57</u>	<u>1060</u>
						<u>60</u>	<u>1061</u>

WESTERN TESTING CO., INC.

Pressure Data

Date 8/17/81

Test Ticket No. 12945

Recorder No. 13267

Capacity 4050

Location 4968 Ft.

Clock No. - Elevation 2147 Kelly Bushing

Well Temperature 120 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2540</u> P.S.I.	Open Tool	<u>6:00P</u>	<u>M</u>
B First Initial Flow Pressure	<u>93</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>25</u> Mins.
C First Final Flow Pressure	<u>93</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>1065</u> P.S.I.	Second Flow Pressure	<u>90</u> Mins.	<u>90</u> Mins.
E Second Initial Flow Pressure	<u>85</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>93</u> Mins.
F Second Final Flow Pressure	<u>89</u> P.S.I.			
G Final Closed-in Pressure	<u>1065</u> P.S.I.			
H Final Hydrostatic Mud	<u>2472</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure  
Breakdown: 5 Inc.  
of 5 mins. and a  
final inc. of 0 Min.

Initial Shut-In  
Breakdown: 15 Inc.  
of 3 mins. and a  
final inc. of 0 Min.

Second Flow Pressure  
Breakdown: 18 Inc.  
of 5 mins. and a  
final inc. of 0 Min.

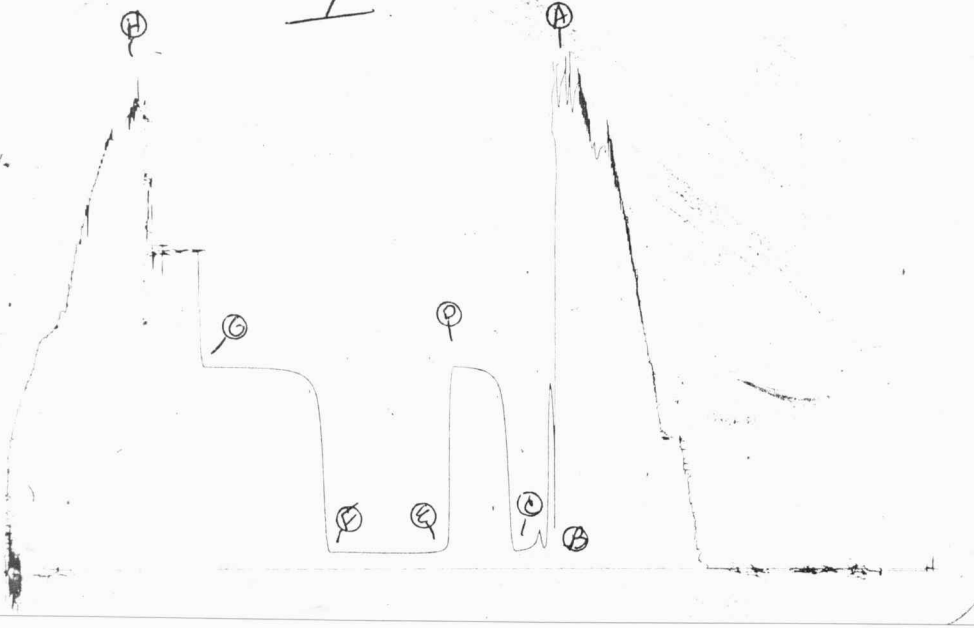
Final Shut-In  
Breakdown: 31 Inc.  
of 3 mins. and a  
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	1062
P 2						66	1063
P 3						69	1064
P 4						72	1064
P 5						75	1064
P 6						78	1064
P 7						81	1065
P 8						84	1065
P 9						87	1065
P10						90	1065
P11						93	1065
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

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TKT #12945

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Company Banks Oil Company Lease & Well No. Harrington #1

Elevation 2147 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. 12946

Date 8/19/81 Sec. 1 Twp. 31S Range 18W County Comanche State Kansas

Test Approved by Scott Banks Western Representative Karl L. West, Jr.

Formation Test No. 2 Interval Tested from 5010 ft. to 5040 ft. Total Depth 5040 ft.

Packer Depth 5005 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 5010 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 5034 ft. Recorder Number 13267 Cap 4050

Bottom Recorder Depth (Outside) 5040 ft. Recorder Number 1051 Cap 4250

Below Straddle Recorder Depth - ft. Recorder Number - Cap -

Drilling Contractor D. R. Lauck Drlg. Rig #1 Drill Collar Length 394 I. D. 2.26 in.

Mud Type salt-clay-premix viscosity 50 Weight Pipe Length - I. D. - in.

Weight 9.4 + Water Loss 14.0 cc. Drill Pipe Length 30 I. D. 4628 in.

Chlorides 25,000 P.P.M. Test Tool Length 30 ft. Tool Size 5 1/2 in.

Jars: Make WTC Serial Number 410 Anchor Length 30 ft. Size 5 1/2 in.

Did Well Flow? No Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Initial flow period strong blow. Final flow period. Gas to surface in seven minutes.

See attached sheet for gas measurements.

Recovered 425 ft. of gas cut mud with a very slight rainbow

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks: \_\_\_\_\_

Time Set Packer(s) 6:00 ~~P.M.~~ <sup>A.M.</sup> Time Started Off Bottom 9:45 ~~P.M.~~ <sup>A.M.</sup> Maximum Temperature 120°

Initial Hydrostatic Pressure ..... (A) 2672 P.S.I.

Initial Flow Period ..... Minutes 25 (B) 116 P.S.I. to (C) 119 P.S.I.

Initial Closed In Period ..... Minutes 48 (D) 1102 P.S.I.

Final Flow Period ..... Minutes 90 (E) 132 P.S.I. to (F) 142 P.S.I.

Final Closed In Period ..... Minutes 60 (G) 1081 P.S.I.

Final Hydrostatic Pressure ..... (H) 2540 P.S.I.

## GAS FLOW REPORT

Date 8/19/81 Ticket 12946 Company Banks Oil Company  
 Well Name and No. Harrington "A" #1 Dst No. 2 Interval Tested 5010' - 5040'  
 County Comanche State Kansas Sec. 1 Twp. 31S Rg. 15W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
<b>PRE FLOW</b>						
						STRONG BLOW    NO GAS

Gas to surface in seven minutes. **SECOND FLOW**

	10 min.	7.0 PSIG	1/2" orifice			94,500 CFPD
	20 min.	4.0 PSIG	1/2" orifice			68,800 CFPD
	30 min.	11.0 PSIG	1/4" orifice			32,400 CFPD
	40 min.	17.0 PSIG	1/4" orifice			42,400 CFPD
	50 min.	21.0 PSIG	1/4" orifice			48,700 CFPD
	60 min.	25.0 PSIG	1/4" orifice			54,700 CFPD
	70 min.	11.0 PSIG	1/2" orifice			121,000 CFPD
	80 min.	7.0 PSIG	1/2" orifice			94,500 CFPD
	90 min.	6.0 PSIG	1/2" orifice			86,300 CFPD

### GAS BOTTLE

Serial No. --- Date Bottle Filled ---- Date to be Invoiced 8/19/81

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All charges subject to 1 1/2% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Banks Oil Company

Authorized by Scott Banks

**WESTERN TESTING CO., INC.**  
**Pressure Data**

Date 8/19/81 Test Ticket No. 12946  
 Recorder No. 13267 Capacity 4050 Location 5034 Ft.  
 Clock No. - Elevation 2147 Kelly Bushing Well Temperature 120 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2672	P.S.I.	6:00A	M
B First Initial Flow Pressure	116	P.S.I.	30	25
C First Final Flow Pressure	119	P.S.I.	45	48
D Initial Closed-in Pressure	1102	P.S.I.	90	90
E Second Initial Flow Pressure	132	P.S.I.	60	60
F Second Final Flow Pressure	142	P.S.I.		
G Final Closed-in Pressure	1081	P.S.I.		
H Final Hydrostatic Mud	2540	P.S.I.		

**PRESSURE BREAKDOWN**

Point Mins.	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.
	of 5 mins.	and a final inc. of 0 Min.	of 3 mins.	and a final inc. of 0 Min.	of 5 mins.	and a final inc. of 0 Min.	of 3 mins.	and a final inc. of 0 Min.
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	
P 1	0	116	0	119	0	132	0	142
P 2	5	116	3	265	5	132	3	354
P 3	10	116	6	667	10	132	6	650
P 4	15	116	9	880	15	132	9	856
P 5	20	118	12	978	20	132	12	949
P 6	25	119	15	1024	25	134	15	1000
P 7			18	1051	30	138	18	1022
P 8			21	1067	35	142	21	1039
P 9			24	1077	40	146	24	1049
P10			27	1083	45	150	27	1059
P11			30	1089	50	154	30	1063
P12			33	1094	55	157	33	1067
P13			36	1098	60	160	36	1071
P14			39	1099	65	159	39	1075
P15			42	1100	70	152	42	1077
P16			45	1102	75	137	45	1077
P17			48	1102	80	145	48	1078
P18					85	143	51	1079
P19					90	142	54	1080
P20							57	1081
							60	1081

TKT # 12946 13269

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